DOCUMENT RESUME

ED 196 606 RC 012 421

AUTHOR Weinstein, Jay A.; Vijayan, K.
TITLE Physical Environment and Social Context: An Approach to Planning for Rural Settlement in Gujarat. Development Series Report 5.
INSTITUTION Iowa Univ., Iowa City. Inst of Urban and Regional Research.
PUB DATE Mar 76
NOTE 35p.; Paper presented at Habitat - Conference (Chandigarh, India, March 18, 1976).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Agricultural Production; *Caste; Change Strategies; Community Development; Foreign Countries; *Land Settlement; *Natural Resources; Public Administration Education; *Rural Development; *Rural Environment; *Social Integration; Social Stratification
IDENTIFIERS *India (Gujarat)

ABSTRACT

Provisional conclusions concerning the interpenetration of social and physical aspects of rural planning research, conducted by the School of Planning (Ahmedabad, India) are considered in this report. Three principal elements whose implementation and maintenance determine physical development are identified: (1) improvements in infrastructure; (2) effective resource utilization; and (3) alternative employments for land, labor, and capital. The outstanding conclusion from the village studies and documentations is described as a general lack of effective organization for the implementation and maintenance of the elements, which the traditional patronage system of administration no longer provides. Coordination of local development efforts of marketing cooperatives, national political and social welfare organizations, and collective land ownership societies are suggested as functional alternatives to the ineffective traditional system, with education in administration being a necessary prerequisite for successfully implementing land redistribution. Case material on the partly-tribal Panchmahals District of northeastern Gujarat, including discussions of land holdings, caste and crop production, indebtedness, and agriculture and government development activities are included for the sake of illustration. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

PHYSICAL ENVIRONMENT AND SOCIAL CONTEXT AN APPROACH TO PLANNING FOR RURAL SETTLEMENT IN GUJARAT

by:
Jay A. Weinstein
and
K. Vijayan

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
John W. Fuller
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PHYSICAL ENVIRONMENT AND SOCIAL CONTEXT
AN APPROACH TO PLANNING FOR
RURAL SETTLEMENT IN GUJARAT

by:
Jay A. Weinstein
and
K. Vijayan

Development Series Report 5

Institute of Urban and Regional Research
The University of Iowa

Presented at:
Habitat - Conference, Chandigarh
India
March 18, 1976

THE NEED FOR AN INTEGRATED PERSPECTIVE

The physical aspects of rural settlement in Gujarat, as in other states, have evolved to their present forms through a complex process of accommodation. Actual and relative scarcities of resources, traditional hierarchies of family, sib and caste, political conquest and colonization, and related traditional patterns of resource distribution and division of labor; all of these have interacted in particular local combinations to determine the character of man-made and man-transformed features of contemporary rural life. As planners and social scientists consider attempts to alter physical aspects of rural settlement, it is clear that due account must be taken of historical, social, and economic contexts. Indeed, research and planning in rural Gujarat premised on an awareness of the interdependencies between physical environment and social context represents an important example of a new, and potentially highly-effective, approach to development.

For nearly four years, the faculty and students of the School of Planning, Ahmedabad, have been experimenting with an approach to rural settlement throughout Gujarat State; the approach attempts to plan in awareness of these interdependencies. In this report, certain provisional conclusions concerning the interpenetration of social and physical aspects of rural planning research, conducted by the school, are considered. For the sake of illustration, we include detailed case material on the partly-tribal Panchmahals District of northeastern Gujarat.

While the subject with which we deal is complex and the efforts at the School of Planning quite young, it is our belief that serious and effective work is being done from this perspective. In any case, it is a perspective that most students of rural development agree is important; but it is one which has, so far, seemed very demanding in application. To the extent that "conclusions" drawn at the School can be communicated, others might benefit

as they build more general and more powerful models of rural settlement in India and throughout the third world.

In the taluka- and district-level village studies, conducted by the School (in Panchmahals, Tharad, Amreli and Valsad), three principal elements whose implementation and maintenance determine physical development have been isolated:

1) Quantitative and distributional improvements in infrastructure: housing, utilities and social services;
2) More effective resource utilization, in particular:
    a) in agriculture: fertilizer and land utilization, crop patterns
    b) in the management of water resources
3) More rational alternative employments for land, labor and capital.

In each of these instances, and in the numerous sub-instances and special cases which have been documented, one outstanding conclusion has emerged. The principal problem for the rural planner in Gujarat lies not in a scarcity of these elements or of their related technologies, for these are either readily available or potentially so in every village studied. Instead, there exists, for a variety of local reasons, a general lack of effective organization for their implementation and maintenance.

Ethnographic details of this situation and its sources have been provided by Breman (1974), among others. Supporting quantitative and survey-based findings have been prepared by the School. Here, we can only outline the principal reasons hypothesized in research and special paper material at the School for the lack of effective organization in rural Gujarat. We discuss three specific social-historical factors and briefly consider the case for and against particular alternative organizational forms. If, in these few pages, we can provide convincing evidence that a coherent perspective is being forged, we will be pleased.

VILLAGES IN TRANSITION

Reflected in numerous ways is the fact that every village in Gujarat is, to some degree, in transition from a traditional (patronage) system of administration. Weber (1958) has established the complex sequence of events whereby prebendism, patronage, and other "feudal" forms of relationship have evolved. The significant point for planners today is that to a substantial degree this system did provide for acquisition and maintenance of infrastructure, resources and employment. Because, for various reasons, this system is nevertheless ill-adapted to reality and ideals of contemporary India (as it was for some time before independence), it is passing (see Lerner, 1963, for the model study of "de-traditionalization").[1] Because of variable population sizes and distances from market centers and because of variable "urban" orientations of local elites (see Breman, 1974, Ch. 11), villages vary in the degree to which the old system prevails. No village is entirely free of it. Indeed, the village and its social system penetrate to the social life of the cities of Surat, Baroda and Ahmedabad, as well.

As the traditional patronage system loses its influence, its ability to provide for the maintenance and development of the physical settlement also diminishes. Nevertheless, in important and often ironic respects, the traditional system can still act as a powerful buffer against assimilation of alternative and more effective forms of organization. In a very broad sense, the privileges of the patron classes have been retained more easily than have their responsibilities. The result is that the presence of a formerly effective system (which has degenerated and is, thus, to varying degrees unarticulated) makes it difficult for alternative, better-articulated systems to take root.

As Myrdal (1971, Ch. 8) has pointed out, this is the condition of "softness" of organizational forms. Because of it, purely utilitarian principles of resource management, etc., cannot be applied effectively;

human relations within even the most "modern" organizations remain oriented to traditional norms. Whereas compliance with traditional norms was, formerly, reciprocated with "appropriate"[2] implementation of settlement maintainence and development objectives, today compliance with these same norms merely has the external appearance of corruption and inefficiency. Today, local hierarchies exist in a mutually supportive relationship with scarcity and maldistribution of infrastructure, resources and employments (see Myrdal, 1971, Ch. 3). But, the fact that elites, at the top of these local hierarchies, do increasingly have access to the amentities which their villages, as a whole, lack, betrays the actual availability of the material and technology for development. In accordance with the theory that underlies the concept of "softness", what is lacking is an alternative set of social relations which would permit more effective utilization of material and technology.

The non-elite majority in rural Gujarat have reacted to the passing of the traditional system with varying degrees of cultural and psychological fatalism. Even this fatalism, which has deep roots in traditional culture, had its benefits when it meant accepting the fate of patronage to gain the benefits of its associated "welfare" orientation toward the settlement. Today, it merely acts as a further barrier to effective physical development.

In his fatalism, the Gujarati villager finds, as perhaps he always has, "security within insecurity (see Chodak, 1974)". This is manifest in numerous physical and economic characteristics of rural settlement, including a universally low savings ratio and a serious scarcity of godown and storage facilities. For a complex set of reasons, there is, on the part of the small farmer in Panchmahals, Amreli, and elsewhere, a clear lack of a propensity to delay gratification.[3] Whatever may be the social or psychological reasons for this outlook, it does make effective organization and planning, that actually involves the non-elite, extremely difficult.

We have assumed, implicitly so far, that a further weakening of the traditional system is a necessary (but not sufficient) condition for effective

organization and, thus, for the development of rural settlement in Gujarat. This is not an uncontested premise. For, for scores of observers from Gandhi to M. N Srinivas, there is much in the old system which India could not and should not do without. Principal among these, from the planning perspective, is the reciprocity between traditional groups and classes--a harmony of inequality, to be sure, but one which, nevertheless, eventuated in the rational management of settlements.

The actual management of rural settlement by the traditional system was adapted to social conditions, technologies and, ultimately, scales of technology that are today (in a word) obsolete. The restoration of traditional systems would entail serious social and economic costs, beyond certain inhumane consequences which most modern thinkers wish to avoid. The problem, for the planner, is best framed in terms of functional alternatives to, rather than restoration of, traditional Gujarati patterns of rural settlement management. Since we are, eventually, oriented to the replacement of the traditional system with more effective organizational forms, let us first consider the principal mechanisms whereby the hold of the traditional system is maintained. We assume that effectiveness in the management of infrastructure, resources, and environment are not among these; their effectiveness is apparently diminishing, to some degree, everywhere.

FORCES MAINTAINING THE TRADITIONAL SYSTEM

The three principal aspects of rural social structure which act in mutual support to maintain the traditional system in Gujarat, as elsewhere, are: land distribution, indebtedness and caste loyalty. Dowry, arranged and early marriage--and consequent high fertility levels--are important normative aspects of this structure. These factors have been recognized by the central and state governments and by local planning authorities; and they are apparent from the research done by the school. Any attempt to implement programs for physical

development in rural Gujarat must take due account of these factors, especially as they bring about less than rational functioning of organization.

Gujaratis exemplify the characteristically Indian institution of attributing great economic, political and symbolic importance to land. The distribution, ownership and labor-relations patterns (in connection to land) have traditionally penetrated every form of social organization. Relationships of mutual support between land-holding patterns and caste or ethnic stratification systems have evolved for centuries. They are clearly reflected in the recent distribution statistics provided in the Tharad studies. Tables 1 and 2 show caste and class-wise destribution of land in two villages in Tharad. The upper caste (in these cases Patel) skew and landless or near landless condition of Harijan and other poor groups shown here is both typical and ancient.

The necessity to redistribute land is a foregone conclusion of all concerned; the necessity to do so on a collection basis is an equally well-known, but more controversial, position. Here, we are stressing the need for redistribution, and on a collective basis as redistribution provides a material base:

(a) For new forms of organization which have the potential, in the ownership of land, to replace the old system in settlement management; and

(b) To positively undermine the old system where it has retained privilege without responsibility.

Present ownership patterns, and the cropping and (seasonal) work habits associated with them, do not lend themselves to effective and rational employment of land, labor or capital. The option of capital intensivization, a commonly followed one by the few owners of moderate-to-large holdings, is a classic case of divergence between the entrepreneur's interest and the general good. Yet, this seems a reasonable course, especially as wage labor has seriously weakened the obligations of patronage.

The present establishment and distribution of infrastructure, too, clearly reflects the economies of scale of holding, rather than rational solutions to environmental problems. For the elite, infrastructure is a valued luxury item;

for the non-elite, the landless and small holder, it is an impossibility while demand elasticity for food is in the .80 - .90 range. Tables 3 and 4 contain household consumption schedules for two Tharad villages. The ratio of expenditure on health, education, transport, etc., to expenditure on food related items is, while, universally low, clearly also strongly correlated with income. This is true of the savings ratio as well.

In other ways as well, the mal-distribution of rural land in Gujarat is an indirect but positive impediment to physical development of villages and other settlements. It has, for example, maintained longstanding reciprocities with indebtedness and, thereby, has acted indirectly as a bar to the generation of both economic and spiritual capital.

The preliminary findings on indebtedness in rural Gujarat, produced at the school, echo the analysis of Government and social science: there is a considerable degree of indebtedness among the non-elite to the elite. The patterns of debt, ranging from short-term principal-plus-interest agreements to classic Hali are widespread and well established. These patterns follow caste and land hierarchies to a considerable degree. Significantly, it is extremely difficult to determine exact amounts of and the precise parties to particular loans. Often the loans are in kind, as is their repayment in the form of, e.g., labor. Thus tney are difficult to estimate. More important, people do not want to talk about it with planners, politicians or social scientists.

The chief obstacle in debt relations is that the surplus generated as interest is not rationally directed. Partly because of its quasi-legal status and partly because of the hierarchical relations which it follows, repayment of loans is too widely diffused in time and employments to constitute investment capital. As all have agreed it entails a tremendous waste of resources. This, less-than-rational, aspect of debt articulates with psychological fatalism and the consequent lack of propensity to save of the non-elite. Delayed gratification, an important component of effective organization of infrastructure, of resources and of employment is senseless to those who are deeply and permanently in debt.

With the first stages of implementation of the central government's program of forgiving rural indebtedness, some encouraging signs that those affected understand and appreciate their new freedom have been observed. Such appears to be the case, for example, in Panchmahals. Nevertheless, the difficult task of establishing consensus about the responsibilities entailed the freedom from debt, especially to avoid future debt and to use the "interest" wisely, requires:

1) An integration of debt-forgiveness and land distribution philosophies. Otherwise, debt patterns return to land-holding patterns; and
2) The redirection of particular caste loyalties from relations which tend to incur debt (or unnecessarily large debt).

From a sociological point of view, caste is but one element in a chain of relationships, extending from the nuclear family, through sub-caste, village social structure and Varna. As such, caste relations entail extensive social, economic and ritual obligations, extended visits with relatives, support of siblings, appropriate weddings and other rites de passage ceremonies. In both their large number and extension, clan-caste relations represent a potential economic liability. To be sure, they involve, to the same degree, a potential asset. But for most rural Gujaratis, the balance of history has been on the liability side: caste loyalty, in important instances, is expensive and this has played the peasant into the hands of the money lender, repeatedly.

Money lending has tended to be the monopoly of one or a few castes (and to some extent Jains) in rural Gujarat. This is one of the better documented aspects of the institution. The often permanent state of being a creditor for one or more families, which members of these castes have enjoyed, has been a powerful support for land distribution patterns and, consequently, caste inequality itself. During the times when these factors in mutual support, also served the function of settlement management, even money lending had some rational justification. Today, it merely mis-directs resources and has the effect of self-perpetuation. It has been supported by caste loyalties and it can never

be completely rooted out without a redirection of these loyalties to alternate forms of organization.

Certain historical functions of caste undoubtedly are, or could be, rational in relation to resource management. This seems particularly true in the case of the division of labor. It would appear that some trade or craft-guild form of organization--along "caste" lines for example--is realistic given the nature of village life in Gujarat. Its other functions, those which entail misdirection of economic, natural and human resources, can no longer be supported.

The combined influence of land distribution, debt, and caste have acted, and continue to act, as supports of the traditional patronage system. The encroachment of modernity, from the cities and via central organizations, has eroded the capacity of this system to effectively develop rural settlement. Its capacity to maintain itself, despite its loss of function can be understood and countered; but the lessons of history are appropriate. Despite a partly proselytizing, Moghul invasion and conquest, despite guild movements in the middle ages, despite British Colonial administration, a fully articulated and effective alternative to the traditional system has never been adopted. When we, today, seek functional alternatives, it is for these reasons best to be as skeptical as possible about even the most promising ones.

ALTERNATIVE ORGANIZATIONS

Here we consider three alternative organizational forms in rural Gujarat which have been examined by the school:

1) Marketing co-operatives,
2) National political and social welfare organizations, and
3) Co-operative land ownership societies.

Others have considered various aspects of these forms of organization in relation to rural development. Research at the school has especially emphasized that each of these can play a role in development of infrastructure, resource

utilization or employments. These organizations, possibly among others, provide a natural basis for collective action which cross-cuts, or can cross-cut and, thus undermine, the traditional system. This can be achieved to the extent that such organizations self-consciously assume responsibility for settlement management, in the realm of their own expertise.

Marketing co-operatives can be especially important elements in rural development programs on two grounds. Because they tend to specialize in a single product or production process, they can maintain the administrative awareness and power to implement necessary for effective resource management. Individually, a marketing cooperative has a rational interest in a variety of physical aspects of settlement related to its product; together, marketing co-operatives in many fields have the expertise to manage much of the economy/environment balance. In addition, the spatial organization of co-operatives--made necessary by central markets--and the actual market inter-dependencies of their products, provide a basis for federation, and thus, economies of scale and integration. Lipset (1950) has provided classic documentation of the development of "co-operative federalism" in Canada. From such studies, and from certain initial successes in India today, we are encouraged that the co-operative movement is appropriate for rational development of rural Gujarat (as elsewhere).

Nevertheless, this form of organization is subject to penetration by traditional interests; especially because it creates administrative needs satisfied only by those who have (a monopoly of) education and other resources. This means, in turn, that education in administration, so that non-elite may achieve responsible posts in co-operative organizations, is a necessary component. It also means that boundaries between administration and line must become more diffuse. In any case, the co-operative, as the other forms of organization, is <u>not</u> immune from the hold of land, debt and caste. Implemented together, however, the three forms can seriously weaken their hold.

National political and social welfare organizations can serve as self-conscious elements in resource management. Their effectiveness lies in their capacity to benefit from economies of scale and integration, and in the issue--

oriented character of affiliation with them (universal standards, thus undermine traditional, particularistic ones). But they are also subject to the same forces as co-operatives--traditional relations can penetrate. Perhaps most seriously, in the past, such organizations have tended to succeed only in delivering services or infrastructure to a settlement. The distribution of these within the settlement has, however, fallen to traditional and ineffective mechanisms.

As discussed, co-operative ownership of land is a key to rural development. Its importance as a new basis of affiliation, cross-cutting traditional ones, cannot be stressed too often. Yet, it too, creates administrative needs which, in the short run, support anti-development institutions. Only to the extent that local development efforts of marketing co-operatives, national political and welfare organizations and collective land ownership societies are co-ordinated with each other and with educational and administrative reforms, can a meaningful redirection of rural development efforts be achieved. The nature of the traditional system as seen from the research at the School of Planning is one of a formidable and only partly functional obstacle to development. To overcome it will take an equally formidable but wholly functional alternative.

Land redistribution must play a central role in this alternative; to ignore this is to miss the essential props upon which other social relations stand. Let us, then, consider land redistribution in some detail. Then, with these matters in view, we will conclude with the Panchmahals' case.

LAND DISTRIBUTION

Unequal distribution of land has articulated with other forms of social inequality for some time in rural Gujarat. These have, in turn, acted as impediments to effective settlement management, particularly as the traditional system has been increasingly threatened by modernity. During the pre-independence period, the British evolved a system of land revenue collection which revitalized the Zamindari.[4] The Zamindars, by viture of the power bestowed on

them by the British, steadily exploited the small farmers. This gave rise to major polarizations in the concentration of wealth and power in rural areas. At the time of independence, socialist commitment and an awareness of these glaring inequalities led the new government to promote a leveling process. The abolition of the Zamindari system and enactment of the Land Tenancy Acts were the major legislative actions directed to this end.

These acts were, however, not focussed on the alleviation of disparities in land holding. They merely enabled the tenant to procure a larger share of the product of his labor and to have the security (within insecurity) of permanent tenancy. Because they have left untouched the inequality in agricultural incomes, which is strongly and directly related to inequality in land holding, these acts have failed to bear fruit.

After considerable planning, at national, state and local levels, income disparities remain great. It is estimated that, throughout rural India, nearly 230 million people were living below subsistence levels in 1968-69 (using Rs. 20/- as minimum annual per-capita consumption at 1960-61 prices). Since the early 1960's the percentage of the population below subsistence has probably increased. It appears that about 60% of India's rural population currently are below the subsistence level. Pointedly, about 75% of the households operating holdings below five acres live below subsistence (consumption) levels. (N.S.S. 11th Round No. 140, Cabine Secretariat). Nearly 50% in each of the smaller land-holding categories are tenants. The picture that emerges in the country and, in essential features, in Gujarat State is one of extensive fragmentation of land, tenancy and abject poverty.

The first Five Year Plan suggested a scheme of cooperative land management at the village level. The object of this scheme was, principally, to consolidate agricultural land into economically viable units. The expected outcome was an increase in agricultural productivity independent of changes in levels of inequality. Because of some serious problems with this approach, subsequent plans have incorporated land ceiling measures explicitly to reduce economic disparities.

Among the more radical approaches to land distribution is the one suggested by B. S. Minhas, former chairman of the Planning Commission. He has outlines a comprehensive program (Minhas, 1970), which includes:

1) A strict, 20-acre, land ceiling on all holdings;
2) Strict limitation on acquiring additional land; and
3) Distribution of "extra" land on a highly progressive basis.

Yet, in even the most comprehensive of approaches, planners and economists tend to treat the problems of land distribution in isolation from the social and economic contexts in which these programs must be implemented and maintained. The perspective which we are discussing points to the necessity of considering land re-distribution as:

1) A long-run process which must articulate with other elements of rural social structure,
2) An ideal which requires effective organizational forms and relations in order to be realized.

Even the most progressive political leaders, planners and social scientists seldom realize that land reform affects not only the highest and lowest strata, but the entire mode of life in rural settlements. It affects production systems, social stratification, and political relations. Its effect on the ability of rural communities to effectively manage their physical environments is, potentially, very great.

The nature of land re-distribution cannot be understood merely from measures like per-capita land availability or percentage increase in agricultural productivity. At the village level it must emerge as one element in an integrated program of more effective manipulation and management of infrastructure, resources and employment. Some of the problems and prospects of such a program can be appraised in one case studied at the School of Planning.

CASE VILLAGE: TIKIVAJU - PANCHMAHALS

Land Holding

Ninety per cent of the village population consists of scheduled castes and tribes. The Patelias are the agriculturists. They cultivate nearly 51% of the total agricultural land. Prajapatis who are potters by occupation, operate nearly 20% of the total agricultural land. Their women work on the wheel (manufacturing pots) while the men are working in the fields. The Bhils and Chamars live a hand-to-mouth existence and operate very small holdings. Most of the Patelias are big land owners. They employee agricultural laborers during planting and harvest seasons. The agricultural laborers are either landless or operate very small holdings. The majority of the Bhils (Scheduled Tribe) are agricultural laborers. A few of them operate large holdings as tenants to the Patelias .

Tables 5-10 analyze land holding patterns in Panchmahals. These tables may be compared with the Tharad material. The average land holding size shown is approximately five acres. Nearly 60% of the total agricultural households cultivate only 23% of the total available agricultural land. All of these are in small parcels of size between .01 acres and 4 acres. It appears that the majority of these cultivators live below the subsistence level. In the higher holding categories there are relatively few households, yet, they cultivate the major proportion of agricultural land available.

Caste and Agricultural Production

The small tenants and the landless laborers are, to an extent, at the mercy of the landlords for whom they work. The landless laborers (most of whom are Bhils) occupy, as laborers, a subordinate position in the production system and an inferior position in the caste hierarchy. (By caste they are scavengers and they perform this function in the village). Labor in this village is paid in kind and cash. Cash wages are a very recent phenomenon. Monetization of agriculture has occured because of the development of a nearby

market. A few manufacturing activities (e.g., brick and tile manufacturing) have been established here in the very recent past. They have employed people from the village. The enterprises are owned privately by people living outside of the village. The wages in this "manufacturing sector" are higher than the agricultural wages in the village.

Indebtedness

During critical times, especially during the pre-harvest period, the landless laborers and small tenants take loans in kind. The accounting is done during harvest season--the amount being scored off against a person's labor if he is unable to pay back in goods or cash. At times landlords advance fertilizer and seeds to tenants too poor to buy them. Most of the short term credit required for production purposes is given by the landlords or smaller land owners.

Credit for social consumption (marriage and other ceremonies) is difficult to secure. Until a few years ago, there was a Jain money lender in the village. Since his departure the laborers have established contacts with money lenders in Gangardi, a small town about 20 minutes' walk from the village of Tikivaju.

The abolition of informal credit has given rise to mixed feelings of security and insecurity. There was much rejoicing over the news of abolition of Rural Debt. Some Bhils (debtors) thought that it was too sinful to breach the faith the money lenders had with them. Abolition of rural indebtedness, by the stroke of a pen, without replacing the traditional system with meaningful credit mechanisms, can hardly be effective in its articulation with other programs for aiding the poor farmer to make a more productive contribution to settlement management.

Indebtedness in this village occurs in one or two ways. Loans are taken either for production purposes, or for consumption. The consumption pattern of most of the landless laborers and small land holders (0-4 acres category) is standardized. Loans become inevitable to subsist especially during the lean

periods. The laborers who are not attached to the landlords have less chance of getting credit.[5] They usually migrate to cities during critical periods.

The incidence of migration is very high in this village. Some families, especially those in 0-4 acres land holding category, have taken up additional occupations like pottery, smithy etc. Most of these families are nuclear and have low indebtedness, compared to the joint families. Expenditure for social purposes, like gifts and marriage, among the nuclear families is far less than among the joint families.

Agriculture and Government Activity

Table 11 includes crop distribution and productivity information. Closely linked to agriculture is dairying. Nearly eighty percent of the rural cultivating households own cattle or sheep or both. Bullocks are owned by only the big cultivators. The yield of milk at present is very low. The veterinary unit operating at Grangardi has not been able to bring about any change in the dairying sector. Milk produced in the village is used only for local consumption. This is probably the case because no well-organized market or cooperatives have been established to provide incentives to the owner to increase production. In fact, the data available at the School of Planning, from the on-going study of Bulsar district, suggest that when milk cooperatives were introduced, the farmers reduced their own consumption of milk to increase their sales.

Government development efforts, though appreciable, have not been highly effective at the local level. The village level worker in Tikivaju appears to be more of an information agent than a change agent. His main role is to distribute pamphlets and brochures on agriculture (although barely 10% of the population is literate). His efforts of the last five or six years, to popularize the use of fertilizers, has not been fruitful. A few farmers, who did yield to the persuasion of the village-level worker got very poor results, owing to the failure of monsoon.

The villagers are afraid to use chemical fertilizers because of the paucity of pure water. During the drought period, the Taluka development authorities organized public work projects like road construction, as a relief measure. The welfare objective of giving employment to the local villagers could not be realized, however, because the contractor used his own labor force to execute the works. By the time protests from the village panchayat received any attention, the project was near completion.

In sum, the village of Tikivaju is in a process of transition. Problems like unemployment and poverty have become insurmountable, and appear to defy rational solutions within the context of existing traditional social organizations. Because of this, and because of market influences, the traditional relations are in a state of flux. Monetization of the agricultural sector, and a shift from agricultural to manufacturing activities, are indicative of the disintegrating forces presently operating. Development programs and legislative measures of the government, have speeded this process of transformation. Undirected change, in the absence of integrative mechanisms, however, has given rise to confusion. What is most desparately required is coordination of change. Organization, with the fullest participation of people themselves, should come about. We must conceive of a unique kind of "managerial revolution".

FOOTNOTES

[1]Technically, "tradition" conveys the sense that the patronage system uniquely has stable roots in the past. Although, the system is old, it was never "stable". It has been a highly flexible and adaptive structure and it retains considerable hold to this day. In addition, non-patronage systems are also quite old. Modern systems of administration have a "tradition" which goes back four or five centuries in Surat, for example. Thus, following Poggie and Lynch, 1974, it is more accurate to speak of local evolution (the changing patronage system) rather than "tradition" as the opposite of modernity. Rather than a "passing of a traditional system", then, we would be better to speak of the replacement of a local system. This articulates with views expressed by Wallerstein (1974) and Chase-Dunn (1975).

[2]The point is not to suggest that resource management under a better articulated patronage system was wholly rational or satisfactory, for this would be a romanticization of the past. It is clear, however, that under patronage the means to implement and maintain rural settlement development were integrated with the overall administration of the village.

[3]Villagers were asked to choose between the following alternatives: "Would you prefer:

1) One kilo rice today or three kilos of rice tomorrow,
2) A cotton shirt today or a terry-cotton shirt tomorrow,
3) A chair today or a furniture set in one year,
4) A free ticket to Delhi in three months or to U.S.A. in one year,
5) A round trip in Gujarat next month or a world tour in five years?"

Preliminary findings show an overwhelming majority preferring immediate gratification. In contrast, considerable variance on these items is shown for a sample of households in Ahmedabad.

BIBLIOGRAPHY

Breman, January, 1974, Patronage and Exploitation. University of California Press.

"Cabinet Secretariat", NSS 11th Round No. 140, New Delhi.

Chase-Dunn, Christopher, 1975, "The Effects of International Economic Dependence on Development and Equality," American Sociological Review, (December).

Chodak, Szymon, 1974, Societal Development, Oxford University Press.

Ghosh, L. N., 1879, The Modern History of the Indian Chiefs, Rajas, Zamindars, Parts 1-2, Calcutta.

Jha, Hetukar, 1975, "Zamindars as Agents of Political Integration". Paper presented at USEFI symposium "Social Diversity, Economic Inequality and Political Integration", Gopalpur-on-Sea, January 12.

Lerner, Daniel, 1963, The Passing of Traditional Society, The Free Press.

Lipset, Seymour, 1950, Agrarian Socialism, University of California Press.

Minhas, B. S., 1970, "Rural Poverty, Land Distribution and Development", Indian Economic Review, (April).

Myrdal, Gunnar, 1971, The Challenge of World Poverty, Penguin Books.

Poggie, John and R. Lynch, 1974, Rethinking Modernization: Anthropological Perspectives, University of Rhode Island.

Wallerstein, Immanuel, 1974, The Modern World-System, Academic Press.

Weber, Max, 1958, The Religion of India, The Free Press.

Table 1: Karanpura (Tharad) 1074-75 --
Caste-wise and Class-wise Land Holding

Sr. No.	Caste	Number of Acres		Number of People		Percapita Land Holding (in acres)	Class Distribution Based on the Size of Land Holdings (individuals) 1-4 Acres		5-10 Acres		13-16 Acres		Total	
1	Patel	1,134	(86.36)	372	(78.81)	3.05	308	(76.42)	48	(90.56)	16	(100.00)	372	(78.81
2	Kumbhar	82	(6.24)	43	(9.11)	1.91	38	(9.42)	5	(9.43)	0	(0.00)	43	(9.11
3	Harijan	42	(3.19)	24	(5.08)	1.75	24	(5.95)	0	(0.00)	0	(0.00)	24	(5.08
4	Bhils	31	(2.36)	17	(3.60)	1.82	17	(4.21)	0	(0.00)	0	(0.00)	17	(3.60
5	Lavar	24	(1.82)	16	(3.38)	1.50	16	(3.91)	0	(0.00)	0	(0.00)	16	(3.38
		1,313	(100.00)	472	(100.00)		403	(100.00)	53	(100.00)	16	(100.00)	472	(100.00

Note: parentheses represent the percentage to the total.

Table prepared by: Krishna Sundaram and Prakash.

Table 2: Gandiali (Tharad) 1974-75 -- Land Holding Caste-wise

Caste	No. of Families	Holding Size of Land	Holding Per Family	Proportion of Total (in percent)
Harijans	7	96.95	13.85	6.66
Rabaris	20	220.18	11.00	0.12
Patel	20	548.23	27.41	0.67
Kohli	60	516.41	8.61	0.48
Kumar	3	17.47	5.82	1.20
Barbar	3	38.07	12.69	2.61
Brahmin	1	---	---	---
Bania	2	18.01	9.01	1.23
Muslim	1	---	---	---
Bania	1	---	---	---
	118	1,455.32		100.00

Table prepared by: Narayanan Nair.

Table 3: Karanpura (Tharad) 1974-75 --
Consumption Schedule at Three Different Total Consumption Levels

Sr. No.	Items	Group "A" Consumptions (Rs)	Group "A" Percentage to Total	Group "B" Consumption (Rs)	Group "B" Percentage to Total	Group "C" Consumption (Rs)	Group "C" Percentage to Total
1	Food (Bajri)	45.00	40.90	32.87	49.54	31.50	90.00
2	Cereals (Jowar)	1.00	0.90	1.30	1.95	0.35	1.00
3	Pulses	1.00	0.90	1.30	1.95	0.18	0.51
4	Milk	16.00	14.54	9.75	14.67	0.35	1.00
5	Ghee	7.50	6.81	3.25	4.89	Nil	Nil
6	Tea	7.50	6.81	3.25	4.89	0.35	1.00
7	Clothing	1.00	0.90	1.30	1.95	0.35	1.00
8	Dwelling	1.00	0.90	1.30	1.95	0.35	1.00
9	Utensils	1.00	0.90	0.65	0.97	Nil	Nil
10	Health	0.50	0.45	0.32	0.48	0.17	0.48
11	Education	0.50	0.45	0.33	0.49	Nil	Nil
12	Recreation	10.00	9.09	3.25	4.89	0.35	1.00
13	Transport	2.50	2.21	0.65	0.92	0.17	0.48
14	Savings	15.00	13.63	6.50	9.29	0.70	2.00
15	Taxes	0.50	0.45	0.33	0.49	0.18	0.51
	TOTAL	110.00	100.00	66.35	100.00	35.00	100.00

Table prepared by: Krishna Sundaram and Prakash.

Table 4: Gandiali (Tharad) 1975-76 --
Expenditure Pattern at Three Different Total Expenditure Levels

Expense Item	Group "A" (3,000)	% to Total	Group "B" (4,000)	% to Total	Group "C" (7,000)	% to Total
Food	2,660	88.66	2,700	67.50	2,750	39.28
Milk & Ghee	---	---	530	13.25	900	12.85
Fuel	40	1.33	70	1.75	75	1.07
Clothing	200	6.66	400	10.00	600	8.57
Health	100	3.33	150	3.75	200	2.85
Education	---	---	100	2.50	2,000	28.57
Recreation	---	---	50	1.25	300	4.28
Misc.	---	---	---	---	175	2.50
TOTAL	3,000	100.00	4,000	100.00	7,000	100.00

Table prepared by: E. Narayanan Nair.

Table 5: Panchmahals 1975: Caste-wise Ownership of Land by Size of Holding

Size (Acres)	Patelias (No.)	Prajapati (No.)	Panchal (No.)	Bhils (No.)	Chamars (No.)
00-04	96	42	30	20	21
05-09	43	19	13	11	7
10-14	11	5	3	3	2
15-19	5	2	2	2	-
20-24	3	-	-	-	-
25-29	1	-	-	-	-
30-34	-	2	-	-	-
35-39	1	-	-	-	-
40-44	1	-	-	-	-
45-49	1	-	-	-	-
TOTAL	162	70	48	36	30

Table 6: Panchmahals 1975 -- Percentages of Land Held by Caste and Size of Holding

Caste	(in Acres) 0-4 Area	%	5-9 Area	%	10-14 Area	%	15-19 Area	%	20-24 Area	%	25-29 Area	%	30-34 Area	%	35-39 Area	%	40-44 Area	%	45-50 Area	%
Patelias	197	45.92	296	46.25	128	45.71	86	45.26	70	100	30	100			39	100	40	100	50	100
Prajapathi	86	20.04	131	20.46	58	20.71	35	18.42					60	100						
Panchals	62	14.45	90	14.06	35	12.50	34	17.90												
Bhils	41	9.55	76	11.87	35	12.50	35	18.42												
Chamars	43	10.02	47	7.31	24	8.57	-													
TOTAL	429	100.00	640	100.00	280	100.00	190	100.00	70	100	30	100	60	100	39	100	40	100	50	100

Table 7: Panchmahals 1975
Size of Holding and Income

Land Holding Size Class	Number of Households	Average Annual Income per Household (Rs)
00-04	209	570
05-09	93	3,020
10-14	24	6,920
15-19	11	12,240
20-24	3	12,680
25-29	1	11,670
30-34	2	9,220
35-39	1	10,660
40-44	1	12,100
45-49	1	---

Table 8: Panchmahals 1975 -- Land Ownership Ratio by Holding Size

Holding Size	Percent Area Under Ownership	Percent Area Under Tenancy	Percent Owned to Tenant	Ratio Owned to Tenant
00-04	11.00	12.50	88.00	0.88:1
05-09	17.00	17.97	94.60	0.95:1
10-14	7.00	8.30	84.33	0.84:1
15-19	4.00	6.38	62.69	0.63:1
20-24	2.00	1.82	109.89	1.09:1
25-29	0.70	0.93	75.26	0.75:1
30-34	2.45	0.82	298.78	2.99:1
35-39	1.60	0.58	275.86	2.76:1
40-44	1.00	1.18	84.74	0.85:1
45-49	1.00	1.73	57.80	0.58:1

Table 9: Panchmahals 1975 -- Distribution of Land Holding

Holding Size	Total Area: Within Holding Size Class (Acres)	Percentage To Total Area	Percentage of Household Within Holding Size Class	Cumulative Percentage
00-04	431	23.50	60.40	60.40
05-09	640	34.97	26.87	87.27
10-14	280	15.30	6.93	94.20
15-19	190	10.80	3.17	97.37
20-24	70	3.82	0.86	98.23
25-29	30	1.63	0.28	98.51
30-34	60	3.27	0.57	99.08
35-39	39	2.18	0.28	99.36
40-44	40	2.18	0.28	99.64
45-50	50	2.73	0.28	100.00
	1830			

Table 10: Panchmahals 1975 -- Caste Wise Land Holding

	Area Total (Acres)	Percentage To Total Agricultural Land
Patelias	936	51.20
Prajapati	370	20.24
Panchal	221	12.08
Bhils	187	10.22
Chamars	114	6.23
	1,828	100.00

Table 11: Panchmahals 1975 -- Agricultural Production (including Tiki Anap)

	Crop	Produce in Quintals	Yield Per Acre in Quintals	Acre Under Each Crop
Kharif	Makai	5,000	3 - 4	1,428
	Dangar	200	3 - 4	57
	Paddy (inferior)	1,000-1,200	1 - 2	550
	Pulse	400	3 - 4	114.28-
				Total 2,149.28
Rabi	Wheat	400	3	133
	Gram (Chenna)	800	4	200
	Jowa	400	3	135
	Onions	2,000	8	250-
				Total 718

Table 12: Panchmahals 1975
Type of Families by Level of Indebtedness

	Nuclear Family	Joint Family
High Indebtedness*	20%	66.6%
Low Indebtedness*	80%	33.3%

*Low Indebtedness: less than Rs. 700/-; High Indebtedness: greater than Rs. 700/-.